WARREN AMERICAN OIL COMPANY, LLC

July 15, 2016

CERTIFIED MAIL # 7012 1010 0001 0804 5345
Return Receipt Requested

Mr. Enoch Johnbull
Superfund Division (6SF-EO)
U.S. EPA Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

RE: Clean Water Act, Section 308 Information Request
Spill in Osage County, OK on or about April 05, 2016
NRC Report No: 1144642

Dear Mr Johnbull:

Please find attached Warren American Oil Company's reply to the Information Request received June 17, 2016 from Mr. Ronald Crossland, Associate Director, concerning the referenced spill that occurred in April, 2016. A copy of the letter sent by Mr. Crossland is also attached.

The Attachments are as follows:

One page summary of the information requested in Items 1 thru 5 and Items 10 and 11 in the EPA Letter

Exhibit A and B showing a "Site Location Map" as per Item 6

Exhibit C and D – Drawing and Sketch showing locations of the facilities and showing the extent of the spill site as per Items Nos. 7 and 8

Photographs showing the spill site during the clean-up and after the cleanup had been completed.

Please let me know if there is additional information that the EPA would like on this incident. I can be reached by telephone at (918) 481-7925 or by email at jdburroughs@warrenamerican.com

Sincerely,

John Burroughs
VP - Operations

THE WILLIAM MEDICAL BUILDING, 8TH FLOOR, 6585 SOUTH YALE AVE , SUITE 800, TULSA, OKLAHOMA 74136
POST OFFICE BOX 470372, TULSA, OKLAHOMA 74147-0372 (918) 481-7990 FAX (918) 481-7922

Information Request
NRC Report No.: 1144642

Brine Spill, April 5, 2016, Osage County, OK

Response to Information Request pursuant to Section 308 of the Clean Water Act

Below is the information requested :

1. REPORT OF SPILL INCIDENT: On or about April 5, 2016 a leak occurred in a 3" flowline that crossed over a small stream bed allowing oil and produced brine to be released into the stream and flow approximately 400 yards downstream. The leak was discovered on April 6, 2016 by the lease operator/pumper. The well was supplying fluid to the damaged flowline was turned off immediately. A small earthen dam was constructed immediately upstream from the leak to prevent any additional fluid from going downstream and a second earthen dam was constructed approximately 400 yards downstream to prevent further water contamination past that point. Oil absorbent pads were applied to collect oil pooled the surface of the stream and loose sphag sorb was used to soak up oil and prevent oil from migrating downstream. Vacuum trucks were utilized to remove oil on the surface as well as contaminated water in the stream. Since the spill originated directly over the stream there was little contamination to grasses or soils as all fluids were contained in the stream. The small amount of oil that did stain any of the vegetation was burned by a fire that the landowner had set to burn his pasture. Any vegetation that still had oil was either weed-eated and/or burned and then put in bags and hauled off. Clean-up efforts were overseen by inspectors from both the Osage Agency of the Bureau of Indian Affairs and by Kent Sanborn, EPA Inspector.
2. The leak allowed approximately 3 Barrels of oil and 15 Barrels of brine to be released into the stream. The volume was estimated based on the difference between normal oil production and production for this day. The water was estimated based on the affected area of the stream.
3. The Spill was estimated to have occurred on April 5, 2016. The release was discovered on April 6, 2016. The oil and brine products remained in the stream for no longer than 3 days once the spill was discovered. The total time to remove oil stained vegetation and remove dams was approximately 10 days at which time the cleanup operations could be considered complete and all product removed from water fo the United States and adjoining shoreline.
4. The leak occurred when debris appeared to collect behind the 3" steel flowline and a subsequent rainstorm allowed water to collect behind the dam. This ultimately built up enough force causing the thread in the flowline to partially pull out of the coupling it screwed into. This allowed a spray of fluid to be released. The flowline was replace and was raised high enough above the stream to reduce the risk of another release happening at this point. Nearby tree limbs were also trimmed to reduce the risk of falling limbs possibly causing a leak in the flowline.
   The general surface/rain water run off direction is to the SE and then to the East from the spill location.
5. The receiving stream was very small and does not have a name.
   a. There were no downstream receiving waters that have names.
   b. The first creek that the stream would have entered would have been Pond Creek which then feeds in to Hulah Lake. Neither of these waters received any contaminated product. Pond Creek was approximately 4.7 Miles from the ending point of the spill and Hulah Lake was approximately 9.7 Miles from the ending point of the spill.
6. See attached Exhibit "A" for the Site Location Maps showing Lat/Longs of Start and End of Spill
7. See attached Exhibit "B" for the drawing of the spill site including facilities.
8. See attached Exhibit "C" for the Sketch of the Spill site showing the extent of the spill. The spill affected the stream for a distance of 400 yards.
9. See attached photographs numbered 1 through 9 showing clean-up operations and after clean-up photos
10. There have been no penalties assessed by the local, state or federal agencies
11. Warren American Oil Company LLC is the operator of the facilities from which the spill occurred.